

CLAIMS

1. A method of introducing a plastic raw material liquid, characterized by:

positioning a plurality of liquid delivery units each for intermittently drawing in and discharging a fluid at a constant rate, parallel to each other, discharging flows of the plastic raw material liquid at different times from said liquid delivery units, combining the flows of the plastic raw material liquid discharged from said liquid delivery units, with each other, and introducing the combined plastic raw material liquid into a casting polymerization mold.

2. A method of introducing a plastic raw material liquid according to claim 1, characterized in that:

said liquid delivery units draw in and discharge the plastic raw material liquid by progressively pressing a flexible resilient tube with presser rollers, changing the shape of a diaphragm made of a resilient material to move the diaphragm back and forth, or moving a plunger back and forth in a cylinder to change the volume of the cylinder.

3. A method of introducing a plastic raw material liquid according to claim 1, characterized in that:

an accumulator for changing the volume of a fluid depending on the pressure of a fluid is disposed in a flow passage for the combined plastic raw material liquid.

4. A method of introducing a plastic raw material liquid according to claim 1, characterized in that:

a filter is disposed in a flow passage for the combined plastic raw material liquid.

5. An apparatus for introducing a plastic raw material liquid, characterized by

an inlet pipe interconnecting a raw material tank storing a plastic raw material liquid and an inlet port of a casting polymerization mold, and an intermittent constant-rate pump disposed in said inlet pipe and having a liquid delivery unit for intermittently drawing in and discharging the fluid at a constant rate,

wherein said intermittent constant-rate pump has a plurality of said liquid delivery units disposed parallel to each other and actuatable simultaneously for discharging the plastic raw material liquid at different times, respectively, and

said inlet pipe having a junction interconnecting respective discharge ports of said liquid delivery units.

6. An apparatus for introducing a plastic raw material liquid according to claim 5, characterized in that:

said intermittent constant-rate pump comprises a pump selected from a roller pump, a diaphragm pump, and a plunger pump.

7. An apparatus for introducing a plastic raw material liquid according to claim 5, characterized in that:

said liquid delivery units are actuatable by a single drive shaft.

8. An apparatus for introducing a plastic raw material liquid according to claim 5, characterized by:

an accumulator disposed in the inlet pipe downstream of a discharge port of said intermittent constant-rate pump, wherein a volume of the fluid in the accumulator is variable depending on the pressure of a fluid.

9. An apparatus for introducing a plastic raw material liquid according to claim 5, characterized by:

a filter disposed in the inlet pipe downstream of a discharge port of said intermittent constant-rate pump.

10. An apparatus for introducing a plastic raw material liquid according to claim 5, characterized in that:

said casting polymerization mold comprises two mold members confronting each other for molding a plastic lens, with a gap between the mold members being sealed, and

an inlet nozzle is mounted on a tip end of said inlet pipe and inserted into the inlet port of the casting polymerization mold.